

Miniature swine whose genomes contain sequences characteristic of pig endogenous retrovirus genes but which are non-infectious to humans are disclosed as sources of organs, tissues and cells for introduction into human recipients afflicted with diseases, or at risk of diseases, whose etiology involves the presence of inadequately functioning organs and for which xenotransplantation of such organs, tissues and cells would have a palliative effect. Methods of producing such animals and for screening animals for the desired properties are also disclosed.